modifications that are made on the basis of substantially the same idea as the technical idea described in the scope of claims and attain similar advantages are encompassed within the technical idea of the present invention.

1-10. (canceled)

11. A method for manufacturing a solar cell by forming a pn junction in a semiconductor substrate having a first conductivity type, comprising at least:

applying a first coating material containing a dopant onto the semiconductor substrate having the first conductivity type; and

performing vapor-phase diffusion heat treatment to form a first diffusion layer in a region applied with the first coating material and a second diffusion layer, which is formed next to the first diffusion layer through vapor-phase diffusion, with a conductivity lower than a conductivity of the first diffusion layer at the same time.

12. A method for manufacturing a solar cell by forming a pn junction in a semiconductor substrate having a first conductivity type, comprising at least:

applying a second coating material containing a dopant onto the semiconductor substrate having the first conductivity type; and

performing vapor-phase diffusion heat treatment to form a second diffusion layer in a region applied with the second coating material and a first diffusion layer, which is formed next to the second diffusion layer through vapor-phase diffusion, with a conductivity higher than a conductivity of the second diffusion layer at the same time.

13. The method for manufacturing a solar cell according to claim **11**, wherein the first coating material contains a silicon compound.

14. The method for manufacturing a solar cell according to claim **12**, wherein the second coating material contains a silicon compound.

15. The method for manufacturing a solar cell according to claim **13**, wherein the silicon compound is silica gel or a precursor of silicon oxide.

16. The method for manufacturing a solar cell according to claim **14**, wherein the silicon compound is silica gel or a precursor of silicon oxide.

17. The method for manufacturing a solar cell according to claim **11**, wherein a third coating material containing a silicon compound is applied over the first coating material and then the diffusion heat treatment is performed.

18. The method for manufacturing a solar cell according to claim **12**, wherein a third coating material containing a silicon compound is applied over the second coating material and then the diffusion heat treatment is performed.

19. The method for manufacturing a solar cell according to claim **13**, wherein a third coating material containing a silicon compound is applied over the first coating material and then the diffusion heat treatment is performed.

20. The method for manufacturing a solar cell according to claim **14**, wherein a third coating material containing a silicon compound is applied over the second coating material and then the diffusion heat treatment is performed.

21. The method for manufacturing a solar cell according to claim **15**, wherein a third coating material containing a silicon compound is applied over the first coating material and then the diffusion heat treatment is performed.

22. The method for manufacturing a solar cell according to claim **16**, wherein a third coating material containing a silicon compound is applied over the second coating material and then the diffusion heat treatment is performed.

23. The method for manufacturing a solar cell according to claim **11**, wherein a surface of a diffusion layer formed through the diffusion heat treatment is etched back.

24. The method for manufacturing a solar cell according to claim **12**, wherein a surface of a diffusion layer formed through the diffusion heat treatment is etched back.

25. The method for manufacturing a solar cell according to claim **11**, wherein a surface of a diffusion layer formed through the diffusion heat treatment is oxidized.

26. The method for manufacturing a solar cell according to claim **12**, wherein a surface of a diffusion layer formed through the diffusion heat treatment is oxidized.

27. The method for manufacturing a solar cell according to claim **11**, wherein the first diffusion layer and the second diffusion layer are formed on at least one of a light-receiving surface of the semiconductor substrate and a back side of the light-receiving surface.

28. The method for manufacturing a solar cell according to claim **12**, wherein the first diffusion layer and the second diffusion layer are formed on at least one of a light-receiving surface of the semiconductor substrate and a back side of the light-receiving surface.

29. A solar cell manufactured with the manufacturing method according to any one of claim **11**, comprising:

the first diffusion layer having a conductivity type opposite to the first conductivity type of the semiconductor substrate; and

the second diffusion layer with a conductivity lower than a conductivity of the first diffusion layer having the opposite conductivity type,

the first diffusion layer and the second diffusion layer being formed on a light-receiving surface of the semiconductor substrate.

30. A solar cell manufactured with the manufacturing method according to any one of claim **2**, comprising:

the first diffusion layer having a conductivity type opposite to the first conductivity type of the semiconductor substrate; and

the second diffusion layer with a conductivity lower than a conductivity of the first diffusion layer having the opposite conductivity type,

the first diffusion layer and the second diffusion layer being formed on a light-receiving surface of the semiconductor substrate.

31. The solar cell according to claim **29**, further comprising a diffusion layer having the at least same conductivity type as the first conductivity type, the diffusion layer being formed on a back side of the light-receiving surface.

32. The solar cell according to claim **30**, further comprising a diffusion layer having the at least same conductivity type as the first conductivity type, the diffusion layer being formed on a back side of the light-receiving surface.

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